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USING THE *QUESTIONNAIRE ON TEACHER INTERACTION* IN THE PROFESSIONAL DEVELOPMENT OF TEACHERS

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For some time in Australia, the Schools Council of the National Board of Employment, Education and Training has been concerned with issues concerning the quality of teaching as evidenced through its reports on *Teacher Quality: An Issues Paper (1989)* and *Australia's Teachers: An Agenda for the Next Decade (1990).* These reports and others highlight the need for teachers to examine continually what they do in their classrooms. Most recently, teacher quality and the need for continued professional development of teachers has been the subject of a ministerial statement (Beazley, 1993). This report notes how the impact of, and responsibility for, effective implementation of change in curriculum and teaching practice falls mainly on teachers. This article assists teachers because it focuses on a technique which teachers can use for examining what is occurring in their own classrooms.

ASSESSING INTERPERSONAL BEHAVIOUR OF TEACHERS IN THE CLASSROOM

International research efforts involving the conceptualisation, assessment and investigation of perceptions of psychosocial aspects of the classroom environment have firmly established classroom environment as a thriving field of study (Fraser, 1994; Fraser & Walberg, 1991). For example, recent classroom environment research has focussed on science laboratory classroom environments (McRobbie & Fraser, 1993), constructivist classroom environments (Taylor, Fraser & White, 1994) and computer-assisted instruction classrooms (Teh & Fraser, in press).

Recently, a team of researchers .in The Netherlands extended this research by focusing specifically on the interpersonal relationships between teachers and their students as assessed by the *Questionnaire on Teacher Interaction* (QTI) (Brekelmans, Wubbels & Creton, 1990; Wubbels, Brekelmans & Hooymayers, 1991; Wubbels, Creton & Hooymayers, 1992; Wubbels & Levy, 1993). This article describes this instrument, reports its cross-validation with an Australian sample, and describes case studies of its use as a basis for teachers' reflection on their teaching.

The Dutch researchers (Wubbels, Creton and Holvast, 1988) investigated teacher behaviour in classrooms from a systems perspective, adapting a theory on communication processes developed by Watzlawick, Beavin and Jackson (1967). Within the systems perspective on communication, it is assumed that the behaviours of participants influence each other mutually. The behaviour of the teacher is influenced by the behaviour of the students and in turn influences student behaviour. Circular communication processes develop which not only consist of behaviour, but determine behaviour as well.

With the systems perspective in mind, Wubbels, Creton and Hooymayers (1985) developed a model to map interpersonal teacher behaviour extrapolated from the work of Leary (1957). In the adaptation of the Leary model, teacher behaviour is mapped with a Proximity dimension (Cooperation, C - Opposition, O) and an influence dimension (Dominance, D, - Submission, S) to form eight sectors, each describing different behaviour aspects: Leadership, Helpful/Friendly, Understanding, Student Responsibility and Freedom, Uncertain, Dissatisfied, Admonishing and Strict behaviour. Figure 1 displays typical behaviours for each sector; for a more detailed explanation of the model, the reader is referred to Wubbels, Brekelmans and Hooymayers (1991). The Questionnaire on Teacher Interaction (QTI) is based on this model.

When the QTI is administered to both teachers and their students, information is provided about the perceptions of teachers and the perceptions of students of the interpersonal behaviour of the teacher. The information obtained by means of the questionnaire includes perceptions of the behaviour of the teacher towards the students as a class, and reflects relatively stable patterns of behaviour over a considerable period.

The original 77-item version of the QTI has been shown to be a valid and reliable instrument when used in The Netherlands (Wubbels, Brekelmans & Hooymayers, 1991). Its cross-cultural validity and usefulness has been confirmed for the USA (Wubbels & Levy, 1991, 1993). Table 1 indicates alpha reliabilities for samples of students and teachers using the QTI's original form in The

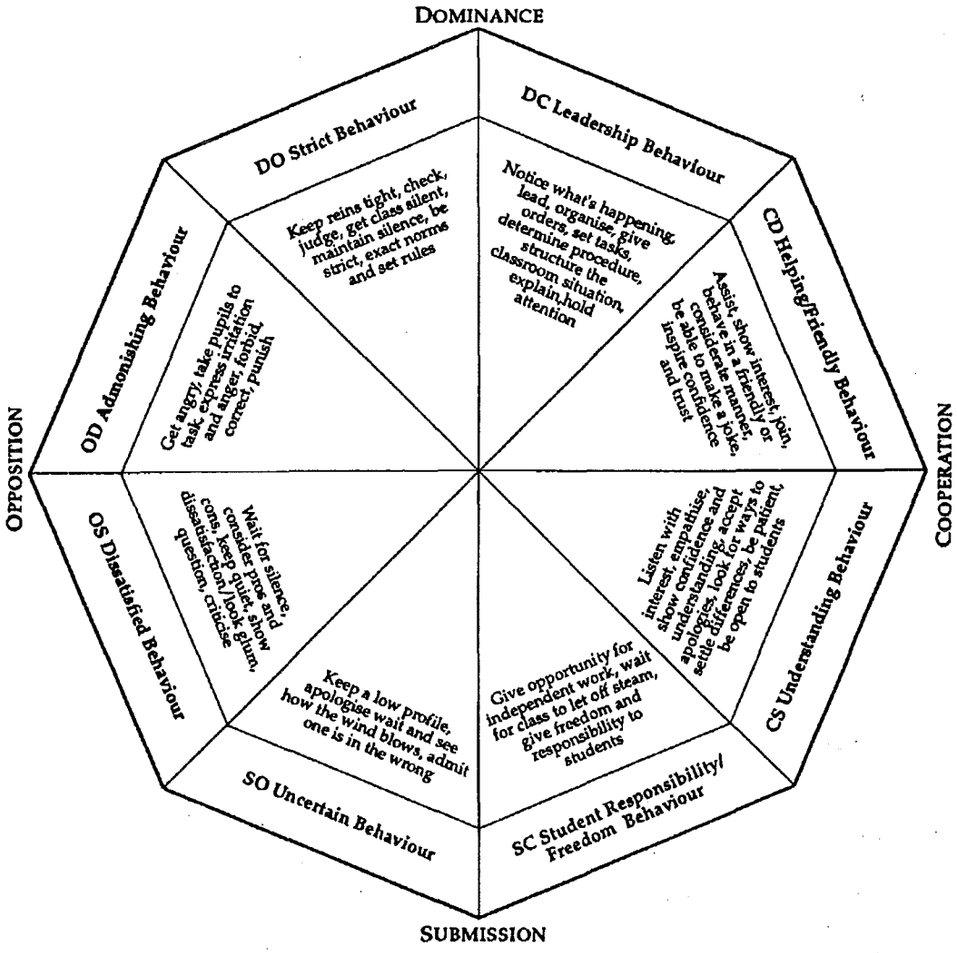

Figure 1: The model for interpersonal teacher behaviour.

Netherlands and the USA. Table 1 also shows the sizes of each sample and indicates that each QTI scale displays satisfactory internal consistency.

In Australia, an economical short version of the QTI is available for use by teachers to gather information about students' or teachers'-perceptions of classes. This version has 48 items, six for every sector of the model of interpersonal teacher behaviour in Figure 1. A complete copy of this short version of the QTI is provided in the Appendix.

In order to facilitate hand scoring, the items are arranged in cyclic order and in blocks of four. Items 1 to 24 in the Appendix assess the four scales called Leadership behaviour, Understanding behaviour, Uncertain behaviour and Admonishing behaviour, whereas Items 25 to 48 assess the scales Helpful/Friendly behaviour, Student Responsibility and Freedom behaviour, Dissatisfied behaviour and Strict behaviour. The total score for a particular scale is simply the sum of the circled numbers for the six items belonging to that scale. Omitted or invalid responses are scored 3.

Table 1: Internal consistency (alpha reliability) for QTI scales for students and teachers in three countries

Scale	Students/ Teachers	Alpha Reliability		
		The Netherlands[a]	USA[a]	Australia[b]
DC Leadership	Students	0.83	0.80	0.83
	Teachers	0.81	0.75	
CD Helping/friendly	Students	0.90	0.88	0.82
	Teachers	0.78	0.74	
CS Understanding	Students	0.90	0.88	0.78
	Teachers	0.83	0.76	
SC Student responsibility/freedom	Students	0.74	0.76	0.66
	Teachers	0.72	0.82	
SO Uncertain	Students	0.79	0.79	0.77
	Teachers	0.83	0.79	
OS Dissatisfied	Students	0.86	0.83	0.75
	Teachers	0.83	0.75	
OD Admonishing	Students	0.81	0.84	0.71
	Teachers	0.71	0.81	
DO Strict	Students	0.78	0.80	0.63
	Teachers	0.61	0.84	
Sample Size	Students	1105	1606	489
	Teachers	66	66	

[a] Original 77-item version of the QTI

[b] Economical 48-item version of the QTI

Table 1 also provides some information about the cross-cultural reliability of the 48-item version of the QTI when used with Australian students. This sample consisted of 489 students in 28 grade 11 and 12 biology classes in Tasmania (Henderson, Fisher & Fraser, 1994). The reliability figures for Australian students compare favourably with those for samples from The Netherlands and the USA.

One advantage of the QTI is that it can be used to obtain the perceptions of interpersonal behaviour of either students or teachers. Furthermore, students can be asked for their perceptions of their actual teacher or the teacher they consider to be their best teacher. Similarly, teachers can be asked for their perceptions of their own behaviour or the behaviour that they consider to be ideal. This allows at least four sets of perception scores to be obtained.

PAST USES OF THE QTI

Wubbels (1993) used the QTI with a sample of 792 students and 46 teachers in Western Australia and Tasmania. The results of this research were similar to previous Dutch and American research in that, generally, teachers do not reach their ideal and differ from the best teachers as perceived by students. It is noteworthy that the best teachers, according to students, are stronger leaders, more friendly and understanding, and less uncertain, dissatisfied and admonishing than teachers on average.

When teachers described their perceptions of their own behaviour, they tended to see the learning environment a little more favourably than did their students. The average teachers' perceptions of their behaviour was between the students' perceptions of actual behaviour and the teachers' ideal. An interpretation of this is that teachers think that they behave closer to their ideal than what their students think.

Another use of the QTI in The Netherlands involved investigation of relationships between perceptions on the QTI scales and student outcomes (Wubbels, Brekelmans & Hooymayers, 1991). Regarding students' cognitive outcomes and differences between the various types of teachers, the more that teachers demonstrated strict, leadership, and helpful/friendly behaviour, then the higher were cognitive outcomes scores. Conversely, student responsibility and freedom, uncertain and dissatisfied behaviour were related negatively to achievement.

Variations in the students' appreciation of the subject and the lessons could be characterised on the basis of the proximity dimension: the more cooperative the behaviour displayed, the higher the affective outcome scores (Wubbels, Brekelmans & Hooymayers, 1991). That is, student responsibility and freedom, understanding, helpful/friendly and leadership behaviours were related positively to student attitudes. Uncertain, dissatisfied, admonishing and strict behaviours were negatively related to attitudes. Overall, previous studies have indicated that interpersonal teacher behaviour is an important aspect of the learning environment and that it is related strongly to student outcomes.

Levy, Créton and Wubbels (1993) analysed data from studies in The Netherlands, the USA and Australia where students were asked to use the QTI to rate their best and worst teachers. Students rated their best teachers as being strong leaders and as friendly and understanding. The characteristics of the worst teachers were that they were more admonishing and dissatisfied.

In a further investigation into the characteristics of teachers, Wubbels and Levy (1991) compared Dutch and American teachers and found very few differences, although American teachers were perceived as stricter and Dutch teachers as giving their students more responsibility and freedom

The eight scales of the QTI were used to develop the Questionnaire on Supervisor Interaction (Kremer-Hayon & Wubbels, 1992), an instrument designed to assess interactions between student teachers and their supervising teachers. The reliability and validity of this variation of the QTI was confirmed and the instrument can be used in studies of relationships between student teachers and their supervisors in addition to those between teachers and students in their classrooms.

The QTI also has been used to develop typologies for student perceptions of interpersonal behaviour in The Netherlands (Wubbels, Brekelmans, Créton & Hooymayers, 1990). Using cluster analysis, eight types were distinguished. The behavioural patterns on the eight teacher types were characterised as directive, authoritative, tolerant/authoritative, tolerant, uncertain/tolerant, uncertain/aggressive, repressive, and drudging. Teacher types associated with greatest student cognitive and affective gains were directive and tolerant/authoritative. Uncertain/aggressive and uncertain/tolerant teacher types were associated with lowest student gains.

Most of the above studies originated from a long-term research project at the University of Utrecht, The Netherlands, named 'Education for Teachers'. During the project the researchers' became convinced that one of the real keys to effective teaching lies in the nature of the interpersonal behaviour of the teacher (Wubbels & Levy, 1993). It appeared worthwhile to investigate the potential for the instrument's use with Australian teachers. In one of the first uses of the translated QTI in Australia (Fisher, Fraser, Wubbels & Brekelmans, 1993), associations were investigated between teachers' perceptions of their work environment, using the School Level Environment Questionnaire (SLEQ) (Fisher &

Fraser, 1990), and students' and teachers' perceptions of their classroom interactions. Results from this study indicated that relationships between SLEQ and QTI scores generally were weak, thus suggesting that teachers believed that they had considerable freedom to shape their own classrooms regardless of the school atmosphere.

Henderson, Fisher and Fraser (1994) used the QTI in Biology classes in Australia and confirmed its reliability and validity. Significant associations were found between students' attitudinal outcomes and most QTI scales except Student Responsibility/Freedom. In classes where the students perceived greater leadership, understanding and helping/friendly behaviour in their teachers, there was a more favourable attitude towards the class and laboratory work. The converse was true when the teacher was perceived as strict, dissatisfied and admonishing. Furthermore, cognitive achievement was higher for the teachers who demonstrated leadership behaviour.

The results of these two Australian studies strongly supported the validity and potential usefulness of the QTI in the Australian context, and suggested the desirability of conducting further research involving the QTI.

USE OF QTI IN TEACHER PROFESSIONAL DEVELOPMENT: CASE STUDIES OF PROFESSIONAL DEVELOPMENT

As previously discussed, the QTI is based on the model depicted in Figure 1, with each of the eight scales in the questionnaire corresponding to one sector of the model. The following discussion shows how the QTI can be used to provide teachers with a picture of their ideal teacher, how they see themselves and how their students see them. Thus, teachers can become aware of how their students view their uncertainty, leadership, etc. and how they view themselves. The provision of this type of information allows teachers or student teachers the opportunity to reflect on their own performance, particularly in relation to their relationships with their students. The knowledge that good teachers are perceived to score highly on the dimensions depicted on the right side of the model in Figure 1 can be used for considering possible changes in behaviour. For example, a teacher wanting to improve leadership behaviour could consider and implement strategies that will enhance this. Alternatively, the teacher might engage in professional development activities specifically designed to enhance classroom leadership behaviour.

Table 2: Mean item scores for six teachers on teacher actual, teacher ideal and student actual forms of QTI

Scale	Form	Mean Item Score for Teacher A	B	C	D	E	F
DC Leadership	Teacher Actual	3.43	4.14	3.71	4.29	3.86	4.01
	Teacher Ideal	4.71	5.00	4.86	5.00	4.43	4.57
	Student Actual	3.01	3.27	4.29	3.86	2.32	3.03
CD Helping/Friendly	Teacher Actual	3.63	4.13	4.13	4.63	4.13	4.00
	Teacher Ideal	4.50	4.38	5.00	4.88	4.25	3.50
	Student Actual	3.97	3.63	4.50	3.79	2.18	2.77
CS Understanding	Teacher Actual	3.63	4.38	4.25	4.38	4.25	3.75
	Teacher Ideal	4.63	4.63	5.00	4.75	4.25	4.38
	Student Actual	3.81	3.82	4.35	3.69	2.38	3.16
SC Student responsibility/freedom	Teacher Actual	2.13	1.88	2.88	1.75	2.00	2.13
	Teacher Ideal	2.88	2.38	3.13	2.63	2.50	2.63
	Student Actual	2.95	2.27	2.57	2.26	2.23	1.84
SO Uncertain	Teacher Actual	2.43	2.14	2.29	1.14	2.14	2.29
	Teacher Ideal	1.71	1.14	1.14	1.00	1.29	2.43
	Student Actual	2.29	2.80	1.40	1.52	3.07	1.96
OS Dissatisfied	Teacher Actual	2.11	1.78	2.44	1.44	2.67	2.11
	Teacher Ideal	1.89	1.56	1.33	1.44	2.11	2.00
	Student Actual	1.70	1.97	1.58	1.96	3.16	3.27
OD Admonishing	Teacher Actual	2.13	1.50	1.75	1.88	2.50	1.63
	Teacher Ideal	1.00	1.13	1.00	1.25	1.75	1.63
	Student Actual	1.37	1.89	1.52	2.40	3.02	4.43
DO Strict	Teacher Actual	2.78	3.22	2.56	3.44	3.00	3.44
	Teacher Ideal	3.11	3.44	3.33	3.22	3.78	3.56
	Student Actual	2.38	2.99	2.65	3.35	2.98	3.40

The QTI was used as the basis for professional development with the six science teachers in a particular school who decided to embark on a professional development exercise together following their introduction to the QTI and their realisation of its potential. Each teacher responded to the actual and ideal form of the instrument while the students of their classes gave their perceptions of the eight dimensions of the QTI for actual teacher behaviour. Scores were calculated for each of the eight dimensions, and the mean item score for each dimension on the three forms (teacher actual score, teacher ideal score, and the class mean of student actual scores) for each of the six teachers is shown in Table 2. Teachers received their results graphically in a form similar to that illustrated in Figures 2 and 3.

Teacher A

The results for Teacher A are shown in tabular form in the first column of Table 2; however, the graphical type presentation shown in Figure 2 was considered more useful and easier to interpret by the teachers. The results of the scores on the three forms of the QTI for each teacher was depicted as in Figure 3. Thus the teachers were able to see how they saw themselves, their ideal teachers and how their students saw them. This proved to be a most useful format for self-reflection or for discussion with their colleagues.

The students' perceptions of Teacher A are characterised by relatively high scores in the friendly (CD) and understanding (CS) sectors of the model. The perception of leadership is not as high as for some of the other teachers. Wubbels, Brekelmans, Créton, & Hooymayers (1990) described this type of teacher as having a pleasant, supportive atmosphere in their classrooms. Students like going to these lessons, are highly involved in the lessons, and follow unwritten rules. According to Wubbels and colleagues, outcomes from this type of teacher are above average.

The observation that the students perceive less leadership and direction could be linked to the observation that the teacher perceives himself to be giving the students less freedom than the students actually perceive that they are getting. This is supported by the comparison of scores in the strict behaviour (DO) and admonishing behaviour (OD) sectors, where the teacher believes that there is a greater degree of these behaviours than the students perceive.

The comparison of the scores for the teacher's perception of actual and ideal behaviour reveals a desire to be more direct by exerting much greater leadership. The teacher's score on the admonishing behaviour (OD) sector shows a desire by the teacher to exhibit much less angry and irritable behaviour.

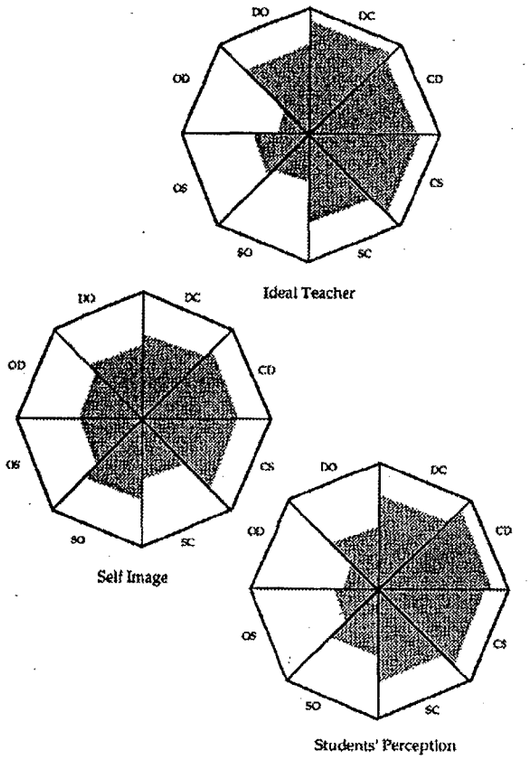

Figure 2: Profiles of Teacher A

Teacher B

Teacher B's three profiles are depicted in Figure 3, and again these could be used in professional development. Teacher B, the least experienced teacher in the sample, is perceived by students to be characterised by a higher degree of uncertain-

ty and strict behaviour. Wubbels et al (1990) have described this pattern in a teacher's behaviour as one of keeping a tight rein on students and insisting on rules and procedures which the students follow.

Interestingly, the teacher also perceives a higher degree of actual uncertainty than was considered ideal in the teacher's view. The teacher has a very low score in this sector in the ideal behaviour profile.

The main differences between the students' and teacher's actual and ideal perceptions of behaviour relate to the fact that the students perceive less leadership (DC), helping/friendly (CD) and understanding (CS) behaviours than the teacher. Although the students also see a greater degree of uncertain behaviour (SO) than the teacher, the teacher ideal profile shows a desire by the teacher to be much less uncertain.

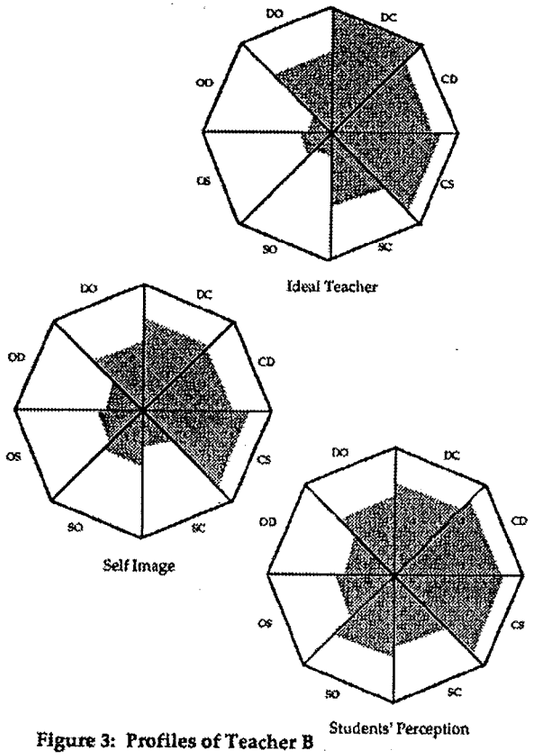

Figure 3: Profiles of Teacher B

A comparison of the teacher's actual and preferred behaviours shows close agreement except for the uncertainty sector mentioned already and also for the leadership (DC) sector for which the teacher would prefer to be showing more leadership. The teacher perceives more actual leadership behaviour than the students.

Teacher C

For the remaining teachers in the group, the results are given in Table 2. Although graphical profiles are not provided for these teachers in this article, each teacher did receive figures similar to those in Figures 2 and 3.

As indicated in Table 2, the students' perceptions of Teacher C's actual behaviour indicate a profile that is similar to a tolerant, authoritative teacher (Wubbels et al, 1990). The lessons of this type of teacher are described as being pleasant but achievement-oriented and task-oriented. The rules and procedures are clear, although the teacher could need to remind the students from time to time. The teacher, according to Wubbels et al, takes a personal interest in the students and emphasises close relationships. Teachers of this type are thought, by their students, to be very good. They also have the highest affective outcome scores and high cognitive outcome scores as well.

The differences between students' and teacher's actual scores relate mostly to the uncertain and dissatisfied sectors of the model. In both cases, the teacher perceives a greater degree of these behaviours than do the students. Compared with the other teachers, this teacher's dissatisfied score of 2.44 is second highest (see Table 2).

Teacher C's self perception is more uncertain than what the students perceive, with a score among the highest in the sample. But the students perceive this teacher to have the lowest uncertainty of all. The teacher, in fact, is one of the senior teachers in the school and also a leader in other areas of school life. The students' faith in this teacher could be enhanced because of the positions that the teacher holds around the school.

According to the teacher ideal results, Teacher C has a desire to increase his behaviour in the leadership and understanding areas of the model. The teacher's scores in these areas are much greater than the average for all the teachers. The teacher also wants to display less of the behaviour in the submission and opposition areas of the model.

Teacher D

Table 2 indicates that Teacher D scores highly on student perceptions on the Dominant sectors of the model and on the helping/friendly sector, involving behaviour that shows interest, is considerate and inspires confidence and trust.

The teacher's ideal perception scores are high in the dominant co-operative and understanding part of the profile. The teacher perceives only a very small amount of uncertaintly in both the actual and ideal profiles as did the students. Teacher D is very experienced in teaching in different countries and states of Australia. Perhaps one would expect that confidence would come from this experience and, therefore, lead to low scores in the uncertainty sector of the profile.

The biggest differences between the students' and teacher's perceptions of actual behaviour are that the students see less leadership, helping/friendly and understanding behaviour than the teacher perceives. In the other areas, the students see more of those behaviours than the teacher perceives.

The two profiles of teacher actual and ideal scores are quite similar, with the major difference being that the teacher would prefer to give students a greater degree of freedom and responsibility. The students also prefer this. It would appear that some external force prevents this happening with the most likely explanation being that the students are working on a tightly-structured syllabus.

Teacher E

This teacher scores, provided in Table 2, are higher in the uncertain area and less in the leadership area. This tends to put the teacher into the uncertain aggressive type. Wubbels et al wrote that, in this type of teacher's class, the students and teacher face each other as opponents in an aggressive kind of disorder. The teacher becomes involved in keeping discipline and does not make an attempt to make the lessons attractive. The teacher perceives that there are much greater amounts of leadership, helping/friendly and understanding behaviours than the students perceive.

The teacher perceives his behaviour to be close to that of his ideal behaviour, although less uncertain and admonishing behaviours are preferred.

Teacher F

The students' perceptions of Teacher F show higher scores in the dissatisfied, admonishing and strict sectors of the profile (see Table 2). Teacher F is a teacher of many years of experience and this could account for the low scores in the uncertain sector. One would expect that an experienced teacher, although being strict and admonishing, would not be uncertain. So here we have a teacher who allows little student freedom, is certain of his actions, exhibits a fair degree of admonishing and strict behaviour, but is understanding of the students' needs.

The teacher's perception of his own behaviour does not correspond well with the students' perception. The teacher perceives much higher scores in the leadership and helping/friendly sectors than the students perceive. The greatest difference, however, was in the admonishing and dissatisfied sectors for which students have higher scores than the teacher. Perhaps the teacher is not really angry, but only appears to be.

The teacher's perception of his actual behaviour with this class corresponds most closely to a directive teacher (Wubbels et al, 1990). The view of the ideal teacher in this situation is also fairly close to the view of actual behaviour. This suggests that the teacher is satisfied with his behaviour in the classroom.

CONCLUSION

The Questionnaire on Teacher Interaction has been established as a valid, reliable and economical instrument for use in providing Australian teachers with information about their relationships with students in their own classrooms. Teachers also found the QTI to be a valuable source of information, particularly comparisons between their own and their students' perceptions, for professional development purposes. In the case studies described in this article, the six science teachers shared their results and discussed possible stategies they could implement to attempt to bring about a change in their own interpersonal relationships with their students. The value of the QTI was in its capacity to provide the teachers with a picture of their ideal teacher, how they see themselves and how their students see them. These pictures became the focus for the teachers' discussions on one aspect of their teaching behaviours.

Currently, researchers in Australia are investigating relationships between student perceptions as assessed by the QTI and teachers' perceptions of

their work environments, and between student perceptions on QTI scales and student cognitive, affective and practical skill outcomes.

Teacher educators are likely to find the QTI to be a valuable instrument in providing data which allow teachers and student teachers to engage in self-reflection on their performances in their classrooms. The data can provide a valuable basis from which useful discussion on teaching strategies can emerge.

STUDENT QUESTIONNAIRE

This questionnaire asks you to describe the behaviour of your teacher. This is NOT a test. Your opinion is what is wanted.

This questionnaire has 48 sentences about the teacher. For each sentence, circle the number corresponding to your response. For example:

	Never				Always
This teacher expresses himself/herself clearly.	0	1	2	3	4

If you think that your teacher always expresses himself/herself clearly, circle the 4. If you think your teacher never expresses himself/herself clearly, circle the 0. You also can choose the numbers 1, 2 and 3 which are in between. If you want to change your answer, cross it out and circle a new number. Thank you for your cooperation.

Don't forget to write the name of the teacher and other details at the top of the reverse side of this page.

Teacher's Name _____ Class ____ School _____

	Never Always	Teacher Use
1. This teacher talks enthusiastically about her/his subject.	0 1 2 3 4	Lea
2. This teacher trusts us.	0 1 2 3 4	Und
3. This teacher seems uncertain.	0 1 2 3 4	Unc
4. This teacher gets angry unexpectedly.	0 1 2 3 4	Adm
5. This teacher explains things clearly.	0 1 2 3 4	Lea
6. If we don't agree with this teacher, we can talk about it.	0 1 2 3 4	Und
7. This teacher is hesitant.	0 1 2 3 4	Unc
8. This teacher gets angry quickly.	0 1 2 3 4	Adm
9. This teacher holds our attention.	0 1 2 3 4	Lea
10. This teacher is willing to explain things again.	0 1 2 3 4	Und
11. This teacher acts as if she/he does not know what to do.	0 1 2 3 4	Unc
12. This teacher is too quick to correct us when we break a rule.	0 1 2 3 4	Adm
13. This teacher knows everything that goes on in the classroom.	0 1 2 3 4	Lea
14. If we have something to say, this teacher will listen.	0 1 2 3 4	Und
15. This teacher lets us boss her/him around.	0 1 2 3 4	Unc
16. This teacher is impatient.	0 1 2 3 4	Adm
17. This teacher is a good leader.	0 1 2 3 4	Lea
18. This teacher realises when we don't understand.	0 1 2 3 4	Und
19. This teacher is not sure what to do when we fool around.	0 1 2 3 4	Unc
20. It is easy to pick a fight with this teacher.	0 1 2 3 4	Adm
21. This teacher acts confidently.	0 1 2 3 4	Lea
22. This teacher is patient.	0 1 2 3 4	Und
23. It's easy to make a fool out of this teacher	0 1 2 3 4	Unc
24. This teacher is sarcastic.	0 1 2 3 4	Adm
25. This teacher helps us with our work.	0 1 2 3 4	HFr
26. We can decide some things in this teacher's class.	0 1 2 3 4	SRe
27. This teacher thinks that we cheat.	0 1 2 3 4	Dis
28. This teacher is strict.	0 1 2 3 4	Str
29. This teacher is friendly.	0 1 2 3 4	HFr
30. We can influence this teacher.	0 1 2 3 4	SRe
31. This teacher thinks that we don't know anything.	0 1 2 3 4	Dis
32. We have to be silent in this teacher's class.	0 1 2 3 4	Str
33. This teacher is someone we can depend on.	0 1 2 3 4	HFr
34. This teacher lets us fool around in class.	0 1 2 3 4	SRe
35. This teacher puts us down.	0 1 2 3 4	Dis
36. This teacher's tests are hard.	0 1 2 3 4	Str
37. This teacher has a sense of humour.	0 1 2 3 4	HFr
38. This teacher lets us get away with a lot in class.	0 1 2 3 4	SRe
39. This teacher thinks that we can't do things well.	0 1 2 3 4	Dis
40. This teacher's standards are very high.	0 1 2 3 4	Str
41. This teacher can take a joke.	0 1 2 3 4	HFr
42. This teacher gives us a lot of free time in class.	0 1 2 3 4	SRe
43. This teacher seems dissatisfied.	0 1 2 3 4	Dis
44. This teacher is severe when marking papers.	0 1 2 3 4	Str
45. This teacher's class is pleasant.	0 1 2 3 4	HFr
46. This teacher is lenient.	0 1 2 3 4	SRe
47. This teacher is suspicious.	0 1 2 3 4	Dis
48. We are afraid of this teacher	0 1 2 3 4	Str

For Teacher's Use Only: Lea ___ Und ___ Unc ___ Adm ___ HFr___ SRe ___ Dis ___ Str ___

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BEGINNING TEACHER EDUCATION STUDENTS' CONCEPTIONS OF TEACHING AND APPROACHES TO LEARNING

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ABSTRACT

Twenty preservice teachers were interviewed prior to commencement of their teacher education course to establish the conceptions of teaching and approaches to learning with which they entered the course. Students were categorised as surface, deep or achieving in their learning orientations (Biggs, 1987). Five conceptions of teaching were identified: the nurturing helper, authority and disciplinarian, shaper of children's lives, presenter of information and facilitator of thinking and learning. There was a consistent relationship between conceptions of learning and conceptions of teaching. Surface learners tended to see teaching as transmission of information. There were very few deep learners, however they tended to see teaching as facilitation of thinking and learning. Achieving learners tended to see teaching as nurturing. Achieving learners also indicated that shaping children's lives and imposing discipline were important.

Beginning Teacher Education Students' Conceptions of Teaching and Learning

Because of their extensive experience of classroom life, prospective students enter teacher education programs with well established conceptions of teaching and learning (Britzman, 1986; Calderhead, 1988; Feiman-Nemser, McDiarmid, Melnick & Parker, 1988; Weinstein, 1990). For example, Lortie (1975) referred to the long "apprenticeship of observation" in schools which forms the basis of students' knowledge of teachers' work. This student experience has resulted in the belief by many preservice teachers that to become a teacher it is merely necessary to behave like the teachers they have observed (Feiman-Nemser et al., 1988). Consequently, many students enter teacher education with an over-optimistic confidence in their ability to teach and a lack of appreciation for the complexity of classroom practice (Book, Byers & Freeman, 1983). Additionally, Feiman-Nemser et al. (1988) found that many students believed that teaching consisted merely of giving students information and Hollingsworth (1989) found that student teachers frequently believed that learning resulted from the provision of teacher-directed information.

Other researchers have found that students see teachers in a nurturing role. Weinstein (1990) reported that a capacity to be friendly and caring was the most frequently mentioned attribute of a "really good" teacher. Book et al. (1983) found that substantial numbers of students entering teacher education saw teaching as an extended form of parenting. Similarly, Calderhead (1988) reports that many students build ideal images of teaching which emphasised the teacher as a guide, confidant and friend.

There is some evidence to suggest that conceptions of teaching correspond with conceptions of learning. For example, Feiman-Nemser et al. (1988) report that the belief that teaching is the giving of information is supported by the understanding that learning is the reproduction of teacher-given information.

Prior beliefs and understandings exert a major influence on the impact of teacher education on students' development as teachers. Hollingsworth (1989) found that prior beliefs provided a filter through which students viewed their teacher education and classroom experience. Thus, she argued that preprogram beliefs interacted dynamically with program content and classroom practice. Similarly, Korthagen (1988) reports that students' learning orientations influenced their ability to benefit from teacher education. Specifically, he found that a reflective (internal) approach to learning fitted more comfortably with a reflective teacher education program. Students with an external learning orientation often dropped-out of the program.

Teachers' images, conceptions and beliefs also exert a powerful influence on their classroom practice (Calderhead, 1988). For example, Anning (1988) found that teachers' beliefs about